

SEMPOWSKI et al  
Appl. No. 10/673,667  
February 28, 2007

RECEIVED  
CENTRAL FAX CENTER  
FEB 28 2007

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of treating ~~or preventing~~ gram-negative endotoxin-induced thymic atrophy, said method comprising administering to a patient in need of said treatment ~~or prevention~~ an amount of an ~~agent~~ anti-leukemia inhibitory factor (anti-LIF) antibody, or fragment thereof, that inhibits ~~leukemia-inhibitory factor (LIF)~~ LIF induction of thymic corticosteroids sufficient to effect said treatment or prevention.

2.-3. (Cancelled).

4. (Currently Amended) The method according to claim ~~2~~ 1 wherein said anti-LIF antibody, or fragment thereof, ~~agent~~ inhibits intracellular or membrane associated events that occur between LIF and a LIF receptor.

5. (Currently Amended) The method according to claim ~~2~~ 1 wherein said ~~agent is an~~ anti-LIF antibody, or fragment thereof, ~~that~~ inhibits interaction between LIF and a LIF receptor.

6. (Withdrawn) The method according to claim 2 wherein said agent is a soluble LIF receptor, or mimic thereof, that inhibits interaction between LIF and a LIF receptor.

7. (Withdrawn) The method according to claim 1 wherein said agent inhibits LIF expression.

SEMPOWSKI et al  
Appl. No. 10/673,667  
February 28, 2007

8. (Withdrawn) The method according to claim 7 wherein said agent is an antisense molecule or a ribozyme.

9. (Withdrawn) The method according to claim 7 wherein RNA interference is used to effect said inhibition of LIF expression.

10. (Currently Amended) The method according to claim 1 wherein said ~~antagonist~~ anti-LIF antibody, or fragment thereof, is administered directly to the thymus.

11. (Currently Amended) ~~The method according to claim 1~~ A method of treating gram-negative endotoxin-induced thymic atrophy, said method comprising administering to a patient in need of said treatment an amount of an anti-LIF antibody, or fragment thereof, that inhibits LIF induction of thymic corticosteroids sufficient to effect said treatment or prevention.

wherein said method further comprises administering to said patient a compound that promotes thymic activation or growth.

12. (Original) The method according to claim 1 wherein said patient is a human.

13. (Withdrawn) A composition comprising a LIF antagonist and a compound that promotes thymic activation or growth.

14. (Withdrawn) A method of screening a test compound for the ability to inhibit LIF induction of thymic atrophy comprising:

i) administering LPS to a rodent in an amount sufficient to induce thymic atrophy,

SEMPOWSKI et al  
Appl. No. 10/673,667  
February 28, 2007

ii) treating said rodent with a test compound,  
iii) determining the effect of said test compound on systemic or intrathymic corticosteroid levels, as compared to an LPS-treated control rodent,  
wherein a test compound that inhibits LPS-induced corticosteroid production inhibits said LIF induction of thymic atrophy.

15. (Withdrawn) The method according to claim 14 wherein said rodent is a mouse.

16. (New) The method according to claim 1 wherein said anti-LIF antibody is administered to said patient.

17. (New) The method according to claim 1 wherein said fragment is a Fab or F(ab')<sub>2</sub> fragment.

18. (New) The method according to claim 1 wherein said anti-LIF antibody is a monoclonal antibody.

19. (New) The method according to claim 1 wherein said anti-LIF antibody is a humanized or chimeric antibody.